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# AIR COMMAND AND STAFF COLLEGE

STUDENT REPORT

HISTORICAL PICTURE OF MAXWELL AFB

Major Larry Edward Kangas 86-1340

-"insights into tomorrow"



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REPORT NUMBER 86-1340
TITLE HISTORICAL PICTURE OF MAXWELL AFB

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SPONSOR AU WARRIOR Council/Capt James Horn

Submitted to the faculty in partial fulfillment of requirements for graduation.

AIR COMMAND AND STAFF COLLEGE
AIR UNIVERSITY
MAXWELL AFB, AL 36112

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| UNCLASSIFIED  | UNCLASSIFIED REPORT DOCUMENTATION PAGE                  |   |   |   |                  |  |  |
|---|---|---|---|---|------------------|--|--|
| 18 REPORT SECURITY CLASSIFICATION   | 16. RESTRICTIVE MARKINGS                                |   |   |   |                  |  |  |
| 20. SECURITY CLASSIFICATION AUTHORITY   | 3. DISTRIBUTION/SYATAMENTY OF REPORT                    |   |   |   |                  |  |  |
| 26 DECLASSIFICATION/DOWNGRADING SCHE  | 26 DECLASSIFICATION/DOWNGRADING SCHEDULE                |   |   | Approved for public release; Distribution is unlimited. |                  |  |  |
| 4 PERFORMING ORGANIZATION REPORT NUMBER(S)<br>86-1340   |   | 5. MONITORING ORGANIZATION REPORT NUMBER(S) |   |   |                  |  |  |
| 6. NAME OF PERFORMING ORGANIZATION ACSC/EDCC  | 8b. OFFICE SYMBOL<br>(If applicable)                    | 74. NAME OF MONITORING ORGANIZATION         |   |   |                  |  |  |
| 6c. ADDRESS (City, State and ZIP Code)  | <del>}</del>  | 7b. ADDRESS (City, State and ZIP Code)      |   |   |                  |  |  |
| Maxwell AFB, AL 36112-5542  |   |   |   |   |                  |  |  |
| Be. NAME OF FUNDING/SPONSORING ORGANIZATION   |   |   | 9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER |   |                  |  |  |
| Sc. ADDRESS (City, State and ZIP Code)  | <u> </u>  | 10. SOURCE OF FUI                           | NDING NOS.                                      |   |                  |  |  |
|   |   | PROGRAM<br>ELEMENT NO.                      | PROJECT<br>NO.                                  | TASK<br>NO.   | WORK UNIT<br>NO. |  |  |
| 11 TITLE (Include Security Classification) Historical Picture of M  | <u> </u>  |   | ·   |   |                  |  |  |
| Kangas, Larry E. Major  | •   |   |   |   |                  |  |  |
| 13a. TYPE OF REPORT 13b. TIME (   | 14. DATE OF REPORT (Yr. Mo., Day) 1986 April 1986 April |   |   |   |                  |  |  |
| 16 SUPPLEMENTARY NOTATION   |   |   |   |   |                  |  |  |
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| This paper is an historical account of Maxwell AFB from its inception in 1910 as a site of the Wright Brothers' flying school to the modern era of the Air University. The educational institutions that lead to the development of Air University are covered in moderate detail.  Part 2 of the product is an oil painting depicting the same story. This painting will be permanantly displayed at the |   |   |   |   |                  |  |  |
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## PREFACE I

The research for this project yields two distinct products: a written historical paper and an oil painting. Both aim to express an analysis of the same material, but each should have its own special flavor.

The paper will be an overview of the highlights of the history of Maxwell Air Force Base, done in the usual written manner. However, the painting will express the same findings as the paper but with an artist's interpetation. Visual images will be the text, but the placement of objects in relation to others as well as the continuity or discontinuity of flow will indicate transitional relationships. The overall effect will state the message in an instant, unlike the paper that will have to be read and consumed before any conclusions can be drawn.

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## ABOUT THE AUTHOR

Major Larry E. Kangas, a USAF Reserve officer from McChord AFB, Washington, is presently attending Air University's Air Command and Staff College (ACSC) at Maxwell AFB, Alabama. At McChord, Major Kangas serves as an operations officer for the Airlift Control Element (ALCE) and an airdrop navigator on the C-141B for the 446th Military Airlift Wing (MAW) (Associate). In civilian life, he is a free-lance artist specializing in military portraits.

Major Kangas' assignments include a Southeast Asia tour in 1973 and Loring AFB, Maine, before going to McChord in 1975. In Southeast Asia as a "Black Crow" on an AC-130H gunship, he earned a Distinguished Flying Cross and seven Air Medals. At Loring AFB, he served as Electronic Warfare Officer on the B-52G.

During his military career, Major Kangas has produced many military murals and portraits. Many of these works still remain with the units or at the installations. The most noteworthy of these works includes a series of murals throughout the public area of the Strategic Air Command alert facility at Loring and one in the foyer of the 446 MAW operations building at McChord (bldg 1205).

In addition to the murals, Major Kangas has been commissioned to paint retirement portraits of several Air Force general officers over the past few years. Most noted among these include the former commanders-in-chief of the Military Airlift Command, Generals James R. Allen and Thomas M. Ryan Jr., and former chief of the Air Force Reserve, Maj Gen Richard Bodycombe.

Upon graduation from ACSC, Major Kangas plans to return to his reserve unit at McChord and continue his military career. On the civilian side, he will re-establish his studio near Alki Point in Seattle, Washington.

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#### INTRODUCTION

Maxwell Air Force Base, situated in Montgomery, Alabama, has played a significant role in the development and eventual establishment of an independent military service -- the United States Air Force. A number of institutions at Maxwell in the 1930's, including the Air Corps Tactical School and the Air Service Board, investigated the potential employment of the airplane. The men of these institutions developed theories which they explored and tested. Their results were then incorporated into the nation's military strategies and later used during World War II. The impact of air power during the war clearly elevated the importance of the military air force to equal the level of the Army or the Navy. Toward the end of the war, many of the leaders of the Army Air Force had previously been students or faculty at the Maxwell institutions. These visionary fliers pushed for an independent military service--their desire was granted with the establishment of the United States Air Force in 1947.

Actually, before the war was over, many of the same Army Air Corps leaders began making plans to re-establish the military education system that previously nurtured the role of military aviation. This institution would grow and become its own major command--Air University--with a mission to provide future leaders the skills necessary to effectively employ air power.

This paper explores the various factors and significant events that lead to the eventual establishment of Air University at Maxwell Air Force Base. The base is one of the oldest associated with aviation; its early aviation history began with the Wright Brothers. However, the interest of the local community probably can be considered the most significant factor that has helped the base endure. Some prominent citizens helped make it possible for the installation to acquire permanent buildings at a crucial time to insure its longevity. Furthermore, this latter factor directly contributed to bringing professional military education to Montgomery creating the basic foundation of Air University and establishing the destiny of Maxwell Air Force Base.

The research and writing of this paper serves another purpose. I will compose and produce an oil painting based on the analysis of the major factors which influenced the development of Maxwell Air Force Base. The painting will include such things as the the key events, people, purpose, and growth, depicting the history of the base. This painting will be permanently displayed in the new Air Force Wargaming Center at Maxwell.

#### CHAPTER I

#### AVIATION COMES TO MONTGOMERY

Everything has a beginning—some specific point, event or action which sets off a series of actions leading to an ultimate end point. Such is the case with Maxwell Air Force Base—today, the home of Air University. Maxwell marks its beginning as 20 February 1910 when Wilbur Wright came to Montgomery, Alabama, looking for a good site to establish a winter flying school. By recognizing an opportunity and taking an aggressive approach to it, several of the city's prominent citizens planted the seeds of what would eventually become the focal point for the development of air power and later the home of Air University.

On this February day, Wilbur Wright attended the meeting of the Commercial Club, the predecessor to the Chamber of Commerce, seeking assistance in locating a suitable field in the Montgomery area. Before coming south, he had learned, from meteorological data received in Washington, D.C., that the area around Montgomery had suitable weather for year-round flying. (25:35) Club President, Fred S. Ball, saw the future possibilities for Montgomery, and immediately set up a committee to work with Mr. Wright and help him find a satisfactory location for the field. (5:6)

After viewing several sites, the committee showed Wilbur Wright a portion of the cotton plantation owned by Mr. Frank D. Kohn located just west of the city and immediately south of the village of Douglasville. The site was a wide and flat area, planted mostly in cotton, and had no real obstacles for a considerable distance. Additionally, the committee presented the famous aviator a deal that was difficult to refuse. Mr. Kohn offered use of the property free of charge, and the Club members agreed to build a hangar of sufficient size to store two flying machines. In addition, the Club agreed to clear an area large enough for operations as well as provide free transportation to and from the city for the "professor of flying" and his students. (5:7)

On 25 March 1910, approximately one month after Wilbur Wright's visit, his brother, Orville Wright, arrived in Montgomery. He found that the Commercial Club had cleared a 3-mile square area for a takeoff and landing, installed lights,

and improved the road to the site. (16:1) They had also constructed a hangar which was covered with some of the Club members' business advertisements. Wright's two students and mechanic, who had arrived a few days earlier, had the flying machine assembled and waiting. During the morning of 26 March 1910 Orville Wright took the Wright Flyer No. 10 up for its initial flight in Montgomery--opening the first chapter in the city's aviation heritage. (15:18-19, 16:8)

The flying school operated only two months before returning to Dayton, Ohio. It had planned to remain in Montgomery only until the weather became "unpleasantly warm." (12:11) However, five students were trained and several advancements in aircraft performance were made. Orville Wright achieved and sustained the altitude of 2,000 feet for a half hour. (16:7) Then on 25 May, his senior and first student to solo, W.R. Brookins, along with student Arch Hoxsey, conducted the first night flight in North America by a heavier-than-air craft. (15:22)

While the Wright Brother's flying school operated in Montgomery, its activities created a great deal of public interest. From dawn to sunset, people came to the site by whatever means they could--by foot, by horse, by carriage, by ancient automobile, or by the special shuttle train offered by the Mobile and Ohio Railroad--"...to see the miracle of man flying like birds." (16:7) Those bringing horses were warned by the local newspaper, the Montgomery Advertiser, to be careful near the site, because the strange noise and sight of the flying machine might scare the animals. (12:30, 17:5-6) Manned flight was an exciting new phenomenon, especially for those that were lucky enough to experience it before operations ceased.

The location of the Wright brothers' school returned to "cotton" for eight years before further aviation activity resumed; however, an aviation heritage had begun in Montgomery. This was a fitting beginning for a place that would play important roles for the further advancement of manned flight. One historian believed that "...the fact that the Wright Brothers had used the Montgomery site as a flying field may have had much to do with its early selection for army use." (12:44)

#### CHAPTER II

# MILITARY AVIATION COMES TO MONTGOMERY

For the next eight years following the Wright Brother's departure from Montgomery, little is known about the activities of the former site of their school. In 1918, However the war effort of World War I brought a military repair facility to the location. Although this next decade appeared rather quiet, important events occurred that anchored the military to this location for the years to come.

Once the United States joined the war in Europe in 1917, many basic pilot training facilities were established throughout the southeastern United States to meet the pilot needs of the U.S. Army Air Service. Taylor Field, the first military flying field in Montgomery, was established 15 miles east of the city in December 1917. (27:854) To support Taylor, as well as the other training fields in the 4-state region with engine repair and other major maintenance, the War Department looked at the former site of the Wright Brothers' school. (12:44) On March 1918, the government leased 302 acres of this site from Frank D. Kohn and established the Engine and Repair Depot. (27:838) Although the depot had many names in its short history, it was best known as the Aviation Repair Depot of Montgomery (ARDMONT). The location offered road, rail, and utilities, as well as people, to support this Furthermore, it was a good central location sort of operation. to receive the damaged airplanes from the training fields in this region. Once construction began on 8 April 1918, the first 52 buildings were ready for use within 90 days. Therefore, ARDMONT and its new commander, Major S.M. Decker, were ready to begin their mission--repair broken airplanes. (5:14-15)

With two huge manufacturing buildings and the countless specialty shops at the Aviation Repair Depot, the men at the facility were capable of repairing and even manufacturing almost every part for an aircraft. The woodworking shops produced fuselage and wing struts, along with all the other wooden parts that were common on these aircraft. The foundry could manufacture aluminum castings for almost every metal part, to include nuts and bolts. (8:23) However, the repair and complete overhaul of aircraft engines was one of the primary functions at this place which was originally called

the Engine Repair Depot. (17:14) Because ARDMONT possessed the machinery to make most any part of an aircraft, in September 1918, the men of the depot constructed a complete aircraft from scratch—the first "made in Montgomery" airplane—with parts from supply stocks and what they could fabricate in the various shops. More than likely this airplane was a Thomas—Morse Scout which was in constant use at most of the training fields at the time. (18:22)

The depot possessed 300 acres of open field immediately outside the repair shops for the purpose of flight testing the repaired aircraft. On a daily basis, large numbers of aircraft of various makes and models were seen on the field or in the Initially, the depot received mostly Thomas-Morse Scouts, a single seater, that was claimed to be "...as swift as an eagle." However, since the Curtiss "Jenny" had become the Air Service's primary basic trainer by 1919, it dominated the facility's work areas. Occasionally, some of the larger aircraft of the day, such as the British-designed DeHaviland DH-4, found themselves at the repair depot. By far, the largest repair project was a Handley Page bomber that was so broken up in a crash 60 miles out of Montgomery that it had to be transported to the shops on three flat bed trucks. The craft was completely repaired with all broken parts replaced with depot-made ones, with the exception of the fuselage center section. (8:23)

The repair depot had been in full-swing operation less than a year when the war ended. With the closures of many of the training bases supported by ARDMONT, the work began to slow down and was taken over by mostly civilian personnel. (5:14) By late 1920, it was feared that the depot would also be closed down; however, the War Department put it on the top of the list of aviation sites to be permanently retained. (8:25, 12:56)

Once the Montgomery installation became a permanent army facility in 1920, the government purchased the land from Frank D. Kohn for approximately \$35,000. (12:56, 15:23) The facility carried on its repair functions until June of the same year, when the repair activities were moved to Dayton, Ohio. (5:14) The post received a new mission as a supply depot, and was renamed the Montgomery Air Intermediate Depot. It was merely a holding facility for the collective parts and government surplus from the closed training fields and other repair depots. For this depot function, two steel hangars were built to store some 250 planes and 500 motors from a closed Texas depot. (12:59)

However, as a result of the Army Reorganization Act of 1920, the Montgomery Air Intermediate Depot received its first operational flying units, the 22nd Observation Squadron and the 4th Photo Section. At the same time that these two units arrived in November 1921, the Americus Air Intermediate Depot and Park Field in Georgia were closed down and all their enlisted personnel were sent to Montgomery. Since the 22nd

Observation Squadron performed an air observation function for ground troops, it spent much of its time participating in exercises at such places as Fort Benning, Georgia. Meanwhile, the 4th Photo Section extensively travelled the South conducting photo mapping missions, the largest of which was mapping the entire Tennessee Valley Project. (5:14,17) Generally, things were quiet with the exception of an occasional air show "...to acquaint the public with the comparative safety of modern aviation...," or a mail plane transiting the base. (12:73-74) On 8 November 1922, the airfield was officially named Maxwell Field in memory of Second Lieutenant William C. Maxwell who died in an airplane crash while serving with the 3rd Aero Squadron in the Philippines. (4:35)

Although activities were relatively quiet, especially with the final disbandment of the supply depot, a significant event occurred that was to ensure Maxwell Field's longevity. Army Air Corps, as it was now called, was undergoing a 5-year expansion program, and 2nd District Congressman Lister Hill wanted some of that expansion in his "pork barrel." Therefore, in 1925, when Maxwell appeared on the War Department's list of installations that were to be abandoned and or sold, he won an appropriation to build some permanent buildings at Maxwell. (12:131) By this time most of the depot buildings were in such a state of disrepair that they had been either torn down or were falling down. Finally, funding was appropriated in 1927 and construction began. The first permanent building to be completed was a dormitory (now Building 836) to house 163 enlisted men. Among the other projects were 13 sets of noncommissioned officer quarters. (5:15-16) In 1926, because of these new buildings, Congressman Hill, with the aid of friends in Washington, D.C., succeeded in receiving the eventual relocation of the Air Corps Tactical School from Langley Field, (12:131) The "TAC School," as it was commonly Virginia. called, was eager to relocate because it had outgrown its facilities at Langley and it desired a better climate as a result of two bad winters. (31:179) This anticipated transfer of the school to Maxwell Field meant that the installation would be assured of a definite future.

This first period of military operation at Maxwell Field, from 1919 to 1931, had seen the field initially occupied as a temporary facility to support the war effort. However, through the aggressive endeavors of several local individuals, the installation achieved a guaranteed future by the end of the decade. But, before moving into this future, a very noteworthy event occurred that is worth exploring.

#### CHAPTER III

#### PRIDE COMES TO MAXWELL

Relations between Maxwell Field and its civilian neighbors in Montgomery have always been good, particularly since they both shared a heritage in the Wright Brother's pioneer location. Realistically, however, the civilian community was interested in the economic benefits that it expected to derive from the relationship. In March 1929, an important event occurred that created a bond and enhanced the heritage that potentially would outlast any buildings or monetary gains. The people of southern Alabama developed a new kind of respect for the installation called Maxwell Field that still endures to this day. The event was the flood of 1929.

Natural disasters, of any kind, generally bring people closer together, and the mutual survival process usually defines their true interrelationship. The words of the the people that lived it best express the mood and reality of the of the event. The following is an extract from the actual official report from the 4th Division at Maxwell Field:

At 9:00 P.M., Thursday, March 14th, 1929, Governor Bibb Graves, of the state of Alabama, telephoned the Commanding Officer, Maxwell Field, and requested that the United States Army Air Corps render assistance to the population of South Alabama, in that reports had been received to the effect that several towns and villages were inundated and all communications severed, highways and railroads, in the effected area washed away, as a result of excessive spring rains. The Commanding Officer assured Governor Graves that every resource of the station would be used and all possible assistance rendered. (5:53)

Within a half hour after the Governor's call for help, Maxwell's commanding officer, Major Walter Reed Weaver, had the post ready for emergency activities. A communications truck from the 22nd Observation Squadron was dispatched to the flooded areas near Elba, where Alabama National Guardsmen were to coordinate ground operations. Through the communications from this truck to aircraft, messages were relayed to Governor

Graves and the American Red Cross. After daylight the next day Maxwell aircraft were taking off every half hour to survey actual conditions. (5:54) One observation of conditions filed by a pilot went like this:

Many people marooned on houses, stores, and barns all over section. Many isolated without food, water, or shelter. Railroad tracks and highways washed away. Several stores and numerous frame dwellings collapsed...over one hundred children marooned on top of large school building...food and blankets must be supplied.... (5:54)

Aid came from Maxwell Field and some other participants—a unit from Langley Field, the Alabama National Guard from Birmingham, and the Naturaline Company from Tulsa, Oklahoma. A total of 25 aircraft consisting of PT—ls, 0—lls, 02—Hs, 0—l8s, A—3s and an Army Douglas C—l transport were available and used for observation and supply drops. (5:59)

When the aircraft returned to observe conditions in the flood-torn areas, they dropped blankets and supplies furnished by the American Red Cross. Most of the aircraft were light, open-cockpit machines which could carry very little cargo for relief distribution. However, in order to get some boat motors to the remote locations of the Alabama National Guard, some inventive personnel devised a means to tie the boat motors on the landing gear struts to be air-dropped. (5:58)

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The flood relief actions from Maxwell Field represented an important innovation in the use of air power. A newspaper expressed it well when it stated that:

South Alabama's flood represents for the first time in the history of the United States the most complete system of relief work demonstrating efficiency of airplanes and trained aerial observer in carrying assistance quickly to distressed thousands in an area which otherwise would be almost inaccessible perhaps for days... (5:61)

For all the emergency efforts, including the approximately 350 roundtrips to the flood-stricken area, the applause was tremendous. When considering all the speeches, newspaper congratulations, formal letters of commendation from the State of Alabama, the War Department, and the many mayors and individuals from the flood-stricken towns, the kind of gratitude that really counted was expressed in this newspaper article:

...reports a flier from Maxwell yesterday afternoon swerved in his course over the flood stricken area in South Alabama, and approached a house top on the estessel resease resolved

outskirts of Brewton, where about the same time on the two days preceding, he had dropped food to a group of people assembled there to escape the water, he saw the refugees suddenly engage in feverish activity...Curious to know what it was about, he leaned far over, thinking perhaps they wished to transmit a message of some kind...they did, and as he watched, he suddenly saw outlined in white cloth, these words: 'God bless you.' (5:65)

The flood of 1929 was the final important element to firmly establish the solid foundation for the future of Maxwell Field. The physical developments of Maxwell during the Air Corps 5-year Development Program gave the installation permanent solidity, and the expected arrival of the Air Corps Tactical School gave it purpose. The unselfish aid that the base gave to southern Alabama during the flood disaster established community respect. Maxwell field was now ready to enter what has been called its "Pre-war Golden Age."

#### CHAPTER IV

# THE AIR CORPS TACTICAL SCHOOL COMES TO MAXWELL

THE RESIDENCE CONTROL STATES OF CONTROLS

The period of the Army Air Corps Tactical School, 1931 to 1941, was Maxwell Field's "Pre-war Golden Age." The development of the school greatly impacted both the facility and the Army Air Corps. The "Tac School's" mission centered around defining the purpose and developing the substance of the growing Army Air Corps, while the importance and growth of this mission forced an expansion of Maxwell's facilities.

Although Maxwell experienced continuous construction from 1929 through and beyond this period, the building occurred in two phases. The first phase began in 1929, shortly after the announcement by the War Department that Maxwell was chosen as the new site for the "Tac School." One of the first structures completed was the primary school building, Austin Hall (now Building 800), that boasted ample space for classrooms and administrative functions as well as possessing a large auditorium. (30:113) All types of other buildings rose from the red clay soil—barracks, dinning halls, field shops, warehouses, and other support facilities, as well as 17 NCO residences. By August 1931, four new steel aircraft hangars graced the flightline where the huge depot facility once stood. (24:32)

Two men were primarily responsible for seeing the initial developments through, Major Walter Weaver, the commanding officer of Maxwell, and Congressman Lister Hill, the man that had the political know-how. (12:131, 19:192) Congressman Hill worked diligently throughout his career for the development of Maxwell Field. (12:107) As a sample of his dedication, in July 1933 the Montgomery Advertiser recorded him saying:

I am glad to say that before leaving Washington I secured the approval of the War Department for the expenditure out of public works funds to be allotted to the Army of over \$1,000,000 for the housing at Maxwell Field of the Squadron Officers' School. (30:25)

The second phase of construction began in 1933 after additional property had been acquired. However, Congressman

Hill introduced an appropriations bill in Congress in 1929 to acquire this additional land for the expansion expected with the "Tac School." As an enticement to help push the bill through, the city of Montgomery offered a gift of 75 acres to the U.S. Government. By mid-1930 the appropriation package received approval, however; it took two years of condemnation proceedings before the purchases were finalized. 12:144) Much of this new property included the small Black village of Douglasville, that had to be eradicated. (12:108) The new officer housing was built on a portion of the village. The first 75 of these 2-story homes were completed by 1933, and These attractive homes still grace the another 24 in 1934. curving drives today in tribute to Congressman Hill and the others that secured the appropriations. (30:54)

The landscape along the flightline changed with the addition of a fifth hangar and a new flight operations building. Envisioning a line running east from the flight operations building, period aerial photos show all structures to the south of that line were removed. Removing the old structures enlarged the flying field and created an "L" shaped junction leaving the operations building located at the junction point. (20:3) Just inside this junction point in front of flight operations stands a stone marking the original Wright Brothers' hangar site. (13:Sect 21) By 1938, being one of the most important military airfields in the nation, Maxwell boasted 1,120 acres (300 for flying field), 3 paved runways, and 6 large hangars. In addition, the installation had some of the finest military academic, housing, and support facilities in the country. (11:20)

Unlike the new quarters that the Air Corps Tactical School moved into when it arrived in June 1931, the school was not On 1 November 1920, the Army Air Service established it as the Air Service School at Langley Field, Virginia, to fill "...the need for a school where air tactics and doctrine could be formulated and taught." (31:176) The 9-month course was designed to share and coordinate tactics with the other branches of the Army, better coordinate coastal defense strategies with the Navy, and "...train the student in command and staff duties of air units." (31:177) In February 1921, it was renamed the Air Service Field Officers' School. That same year the students and faculty participated in General "Billy" Mitchell's bombing demonstrations on the captured German cruiser Frankfurt and the battleship Ostfriesland to prove the effectiveness of the fledgling air arm of the Army. (31:177) In 1922, the school's name was changed again to the Air Service Tactical School.

By the time the school became the Army Air Corps Tactical School in 1926, it had been joined by the Air Corps Board and the 23rd Composite Group. The Air Corps Board was an agency created to "...function as a research group in air strategy and tactics." (2:2) It would, "...consider such subjects as may

be referred to the Board by the Chief of Air Service, and to originate and submit...recommendations looking to the improvement of the Air Service." (29:1) The purpose of the 23rd Composite Group, possessing a wide variety of aircraft, was "...to serve as a laboratory for service test of equipment (airplanes, armament, radio, et cetera), to carry on research work in tactics and technique, and to demonstrate the same." (29:2) Finally, "...the Tactical School is a teaching and dissemination agency. It is obvious that the three combined cover the fundamental requirements for a tactical center." (2:2)

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By the time the "Tac School" arrived at Maxwell in 1931, some 20 subjects were taught in a 9-month program. curriculum consisted of three primary departments: (l) Air Tactics and Strategy; (2) Command, Staff, and Logistics; and "After lectures and class discussions the (3) Ground Tactics. students attempted to apply principles to theoretical problems in demonstrations and in maneuvers." (31:1800 At least once each year, the school tested these new tactics with the War College from Washington, D.C. "These maneuvers often pointed out the sharp differences between air and ground views on the proper employment of the Air Weapon." The first maneuvers at Fort DuPont, Delaware, showed the War College, with their gross and erroneous interpretations, had not given the Air Corps proper consideration in the planning phase. Much of this was to change as a result of encouraging officers from the other services to attend the school, because it gave "...a practical means of disseminating Air Service doctrine plus develop a closer spirit of cooperation." Two years after the school moved to the Maxwell location, the maneuvers began to be held at Fort Benning, Georgia. (24:11-20)

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The insignia of the school consisted of a clenched fist directing four lightning bolts; one bolt shot across the sky, while the remaining three were aimed at the ground. represented the four major areas of air tactics studied and formulated at the school--pursuit, attack, bombardment, and observation. (15:56) Just as the lightning bolts were clearly distinct and separate, the advocates of each were as well. Through the years intense rivalry existed between the strong advocates of the Bombardment Section of the faculty lead by Robert Olds, Kenneth Walker, and Harold George; and the Pursuit Section, spearheaded by Claire Chennault. (4:12) The writings of the bombardment advocates, Lord Hugh Trenchard, Italian General Gulio Douhet, and General Billy Mitchell, dominated the direction of air strategy in the 1920's and 30's. Consequently, to demonstrate the importance and potential of fighter aircraft, Chennault organized and led a pursuit demonstration team, called "The Men on the Flying Trapeze," that performed at air shows and other aviation (4:20-21) However, when his pursuit course was dropped from the curriculum in 1936, Chennault left the

service. (7:89)

Despite these rivalries, the school planned for the future of the Army Air Corps professional military education. 1939, Maxwell had the Army Air Corps Tactical School, the Air Corps Board, and the 23rd Composite Group all co-located at one location. In essence, this collection comprised the fundamental requirements of a tactical center that was advocated by Colonel Walter Weaver, the Commandant of the "Tac School" as well as the Commanding Officer of Maxwell Field. Many staff studies were accomplished to evaluate the military education system. Early in 1941, the Harmon Memorandum recommended an academic system structure that included three schools to benefit officers at various stages in their careers -- a basic, an intermediate, and an advanced school. study also recommended that the school be located at Maxwell. Incidentally, this was the first time the term "Air War College" had been used. By June 1941, the Chief of the Air Corps approved a plan from the Yount Board study which included most of the features of the above mentioned studies. However, the plan had just barely been implemented when World War II (31:189-205)started.

The schools were closed at the beginning of World War II because these well-trained officers were needed in the operational environment rather than engaging in "academic pursuits." However, the school was the intellectual center of the pre-World War II aerial doctrine which "...wrote, taught, argued, and hammered out the aerial doctrines and strategy that the United States would employ against the Axis Powers in World (9:192) The secret war plan used by the United States throughout World War II (AWPD-1) was developed at the Air Corps Tactical School in the sense that the five primary authors of the plan were all graduates of the school and, with the exception of one, were faculty members. (6:209-11) Interestingly, the "Tac School graduates did quite well in their careers. Statistics show that "...of the the 944 Air Corps Officers who graduated from the Air Corps Tactical School from its beginning in 1920 to its ending in June 1940...334 of these graduates became general officers." (31:187) Many of these men were the Air Corps leadership in the war as well the leaders in the decade afterward.

At the start of this decade, Maxwell Field was an installation consisting mostly of temporary, beaverboard buildings that were remnants from the depot days; its runway and taxiway were just a grass field. In a mere 10 years, Maxwell grew to become a huge installation, pushing at its borders with extensive housing facilities and long, paved runways. The school had been busy preparing the aviation officers of the Army Air Corps as well as the first generation leaders of the post-war United States Air Force.

#### CHAPTER V

## WORLD WAR II COMES TO MAXWELL

Maxwell Field's transition into the World War II era began as early as 1939 when Germany advanced into Poland and France, thus signalling the United States to prepare for possible involvement. The War Department's priority rapidly turned to building a mass pilot force which greatly reduced the need for the "academic pursuits" of the Air Corps Tactical School. (15:40) While the "Tac School" was shortening its curriculum to a 10-week course, the rest of Maxwell was becoming a factory to crank out pilots and other crewmembers by the thousands. (31:204) With all this new activity, the installation was forced to expand and construct more facilities. By the end of the era, Maxwell would be a very different place.

By 1941, the Air Corps Tactical School dwindled down to a mere skeleton of what it had been. The Air Corps Board was moved to Eglin Field, Florida, to become part of the Proving Ground Command. Furthermore, the academic section of the school became part of the Directorate of Individual Training in Washington, D.C.; this small remnant of the faculty "...produced training literature urgently needed by the Army Air Force, maintained the school files, and tried to keep the courses of instruction in such condition as to facilitate preparation of lectures in the event the school should be reopened." Despite efforts to reopen the school at Maxwell, a new institution opened in Orlando, Florida, called the Army Air Force School of Applied Tactics that functioned as a wartime agency to study "...global air war problems, rather than theories of employment." (15:40-41)

Just prior to the "Tac School" disbandment, Maxwell had become the headquarters of the Southeast Training Center (SEACTC). The War Department established SEACTC as one of the three regional centers to be focal points for all aircrew training in their respective regions as part of a national plan to train 10,000 men annually, including 7,000 pilots. (12:210) One of SEACTC's subordinate training fields was the Montgomery Municipal Airport, later to be called Gunter Field in honor of former city major, William A. Gunter. (12:230) It served as a location for basic pilot training. During the initial construction at this site, the first two pilot classes trained at Maxwell using 34 BT-14 aircraft that were on loan from

Randolph Field in San Antonio, Texas. In addition, the students were required to live temporarily in a "tent city" at Maxwell Field. (12:223) Another local SEACTC base to open was the resurrected site of Montgomery's first military flying school, Taylor Field. It served as an auxiliary landing field for Gunter in 1944. (27:854)

Meanwhile, Maxwell Field hosted several different flying schools. Throughout the war years, however, different schools arrived as others left. The two most noted at the beginning were the Advanced Flying School and the Aviation Cadet Replacement Center. The Advanced Flying School was established with a two-fold mission: to train instructor pilots as well as to give them the leadership skills necessary to command or handle supervisory roles effectively. The ultimate purpose of the school was to create a uniformity in instructional The school transferred to Randolph in May 1943. The technique. Replacement Center, on the other hand, initially had two schools--the Pre-Flight School (Pilot) and Pre-Flight (Bombardier-Navigator). In nine weeks, cadets were given intensive physical and academic training in preparation for beginning their basic flight schools. Both schools served a "boot" camp role as well as providing a screening function to weed out the cadets who had no flying aptitude. (12:220-225)

The Southeast Air Training Center later enlarged to become the Eastern Flying Training Command responsible for 31 major installations and 61 college detachments from the Mississippi eastward. One of the more interesting of these flying schools was located near the Tuskegee Institute at Moton Field. It was a basic and advanced pilot training base, known as the 66th AAF Flying Training Detachment, established to generate Black pilots, navigators, and ground support personnel. integration efforts at other training facilities failed, but with pressures from Black interest groups as well as aggressive Black cadets, such as the West Point graduate, Benjamin O. Davis Jr., the Army Air Force established Tuskegee as an "experiment." (10:136, 21:1153) In 1943, training began at Tuskegee to train a B-25 wing composed entirely of Black crewmembers and support people. Davis, who eventually became a Lieutenant General, commanded the 99<sup>th</sup> Squadron of P-40 Warhawks that was to honor themselves in combat over Italy. (10:141)

However, the highlight at Maxwell for the later months of the war came with the activities of the B-24 Transition School (AAF Pilot School, Specialized Four-Engine) and the B-29 Transition School. By 1943, these aircraft were flying 10-hour days, seven days a week. All totaled, the number of people trained at Maxwell during this war period was impressive. The pre-flight schools transformed over 100,000 basic cadets into aviators; the B-24 Transition Schools produced 2,653 Liberator pilots; and the B-29 program turned out 728 crew teams, each made up of a pilot, co-pilot, and flight engineer. (12:269)

When the war finally ended, many of these pilots and crewmembers got an opportunity to visit Maxwell one more time, when the base became a separation center charged to release from the service all AAF personnel within 300 miles. (15:50-51)

Throughout the war years, these schools brought many people to Maxwell Field which greatly stressed the facilities of the base. Considerable building occurred throughout the era. For example, in March 1941, 60 acres were acquired to build about 100 buildings to meet space demands created by the Cadet Replacement Center. (12:43) In mid-1940 the United States Housing authority participated with the Montgomery Housing Authority on a joint venture to build 424 family housing units to replace the rundown houses between the base and downtown north of Bell Street. These homes were to be used by Maxwell personnel and given to Montgomery after the war. (30:126)

When the big bombers arrived at Maxwell in August 1943, they required longer runways than the existing ones; both of Maxwell's runways were lengthened to 5,500 feet and stressed to accommodate the B-24. In late 1944, with arrival of the much heavier B-29, the runways were further lengthened to 7,000 feet. (12:267) This latter runway expansion required the condemnation of approximately 1,000 acres as well as the realignment of U. S. Highway 31 to parallel the railroad tracks. In addition, the largest hangar (227 by 202 feet) to be built at the base was constructed, as well as a second control tower to manage the increased aircraft traffic. (15:45, 50)

This wartime era brought many changes to Maxwell Field. With its mission losing its overall priority, the Air Corps Tactical School disbanded. However, the school's graduates went to war using the skills learned at Maxwell to contribute to winning the war effort. The base saw many new students earn their "wings" and enhance their skills at the many schools located at Maxwell. The facility gained new property as well as numerous new buildings with the many expansions required to meet the wartime commitment. The base was also introduced to new technological advances, represented in the B-24 and the B-29. New advances in technology bring on the need to develop tactics, strategy, and doctrine to keep pace with these developments. Maxwell soon took on that role again.

#### CHAPTER VI

# AIR UNIVERSITY COMES TO MAXWELL

The doctrine and teachings of the Air Corps Tactical School proved to be invaluable during the air battles of World War II. The Army Air Force leaders recognized the value of such a school and planned to establish a network of schools for advanced military education and doctrinal development after the war. The focal point for this system of schools was to become Air University located at Maxwell Field.

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Prior to the end of World War II, the Army Air Force had drawn up a plan that delineated the full spectrum of their post-war education system. By September 1944, this plan included source institutions such as an air academy, to the advanced education system that the Yount Board proposed back in 1941, that spelled out the format for an advanced "Tac School." (31:211-225) When the War Department called for each major force to submit a post-war education plan in August 1945, the Army Air Force plan needed only minor revision before submission. On 8 October 1945, the plan received approval. (31:228-234)

On 1 November 1945, The Air Staff issued a memorandum to the Assistant Chief of Staff-Operations and Training, Lt. Gen. Hoyt S. Vandenberg, recommending the immediate establishment of the school system. The order asked him to:

1) Redesign what was formally the Air Tactical School as the Army Air Forces School; (2) establish three major courses under the school (Tactical Course, Command and Staff Course, and Air War Course); (3) to organize the school in such a manner "as to permit ready conversion into an A.A.F. University with three or more colleges..." (31:238-239)

Maj. Gen. Muir S. Fairchild was designated the Commandant of this new school. Maj. Gen. David Schlatter became the acting commandant until General Fairchild became free to assume the post, whereupon the latter would become the Vice-Commandant. Meanwhile, General Schlatter closed the Army Air Force School, which was part of the AAF Center in Orlando, and brought it to Maxwell. The remaining courses at the AAF Center remained in

Orlando but were redesignated the AAF Special Staff School under the administration of this new Army Air Force School at Maxwell. By a special provision in the transfer order, the insignia that was used by the AAF Tactical Center at Orlando was designated the new emblem of the AAF School. This was the same coat of arms used by the former Air Corps Tactical School. (31:243)

The school system was designated Air University (AU) on 12 March 1946. It also became a separate command of the Army Air Force so that it might concentrate on "...(1) the development of sound Air Force doctrines, concepts and long-range objectives, and (2) the professional education for officers through progressively graduated general duty schools." (19:3) Other schools were attached to AU over the ensuing years such as the AAF School of Aviation Medicine in San Antonio, Texas, and the AAF Officer Education Program at civilian institutions. (31:263)

Two major reorganizations occurred since the establishment The Korean War brought a decrease in the of Air University. student population and, therefore, a reorganization and consolidation of the various schools. All classes at the Air Tactical School, located at Tyndall AFB, Florida, and the Air War College at Maxwell were indefinitely suspended. Command and Staff School (AC&SS) was almost relocated to Orlando, but was retained at Maxwell to be an intermediate headquarters between AU and several operating schools. "Craig and Tyndall AF Bases...transferred from AU to Air Training Command, remnants of both Air Tactical School and Special Staff School were consolidated at Maxwell AFB under the Air Command and Staff School... and became known as the Squadron Officer's Course. The AC&SS course of study became the Field Officer's Course placed under the administration of Headquarters AC&SS. (1:7, 19:5)

The consolidation of schools under the Air Command and Staff School greatly strained the facilities of Air University. By 1951, the schools were spread out in 38 different buildings, and the Air University Library was scattered in nine buildings. Even with the modification of existing buildings and the use of temporary mobilization structures, classes, seminars, and administration offices were forced to move into the living quarters. Furthermore, the Air Force had designs on expanding to 126 wings. These combined factors led to the design and building of a consolidated campus This program, called "New Home Project," resulted in a collection of academic buildings and a library within a large circle referred to as the "Academic Circle." In addition, to accommodate the students, a group of dormitories were constructed to the south of the complex. (24:1-4) Although the Air War College (AWC) was not administered by Headquarters AC&SS, it was offered one of the new buildings. The AWC turned down the offer because it expected to receive its own separate

complex to be built just north of the circle. Furthermore, the AWC felt that the facility was not large enough for them. It did, however, move into the circle later. (23:18)

The second reorganization occurred in 1959. The intermediate headquarters of AC&SS, by now called Air Command and Staff College, was discontinued, and all major schools began to operate as separate schools with command that reported directly to the Commander of Air University. The Air Command and Staff College became responsible for just one intermediate professional course and was no longer responsible for the other schools, such as the Squadron Officer School. (19:8) Within this period a number of other reorganizations occurred. mention just a few, the School of Aviation Medicine was transferred to Air Training Command; the Academic Instructors School and the Allied Officer's Schools were formed; and Air University acquired operational control of the Air Force Museum at Wright-Patterson Air Force Base from 1960 to 1965. (18:15-17)

The present curriculum of Air University follows in the tradition of the former Air Tactical School, only far more expanded and modernized. Many things parallel the former "Tac School and the present educational institution. Both enlisted their instructors from graduating classes to create a continuity in the educational evolution of the school. institutions offered correspondence courses as well as short courses for those that could not attend the full course. (13:11, 24:16) Students from the other service branches and foreign countries have been encouraged to attend. (13:22)Moreover, the present Squadron Officer School, Air Command and Staff College, and the Air War College have carried on the tradition to broaden an officer's skills and knowledge in becoming a more effective officer and, therefore, enhancing the overall quality of the United States Air Force.

Unlike the "Tac School," Air University presently does not have a flying program; aircraft were maintained for a number of years to support flight currency requirements for students. In 1971, Congress waived the flying requirements for all students while attending the schools. Therefore, without the need to keep and maintain aircraft for the faculty and students, the last of the the remaining T-33s departed in 1973. (26:8-13)

Air University at Maxwell Air Force Base is the modern revival of the Army Air Force Tactical School. With the value of professional military education proven in the Second World War and the establishment of the independent United States Air Force in September 1947, the post-war leaders insured that Air Force education system would be around to continue shaping the future doctrine and leaders for the next war. Meanwhile, the physical appearance of the base has changed with each growth period. The growth continues, as evidenced by the recent addition of the Air Force Wargaming Center and the specially

tailored facility that it occupies on the west side of the "Academic Circle." Growth has been a tradition for both the professional military education and the facilities that have housed them at Maxwell. Since the Air Force is predominantly a technological force, continued growth in both areas can be expected in the future.

#### CONCLUSION

For a proper interpretation of the history of Maxwell Air Force Base and how it relates to the eventual establishment of Air University, its background must be totally analyzed. That has been the objective of this paper. The total story reveals the important interrelationships that have influenced its history. However, the author feels that the most effective method to translate and present these key elements requires expressing them in a totality; in other words, the full impact captured in one glance. Hence, the second objective of this research effort consists of producing a painting, a visual presentation of 75 years of Maxwell that can be consumed in an instant.

The visual communication media, such as a painting, can express far more than most written pieces. Fundamentally, language is universal. Qualifying elements, such as time, linkage, balance, strength, and surprise, are expressed symbolically and often covertly. For example, this painting of Maxwell's history will clearly show an equivalence between the Air Corps Tactical School and Air University simply due to their relative symmetry on the canvas. The academic nature of both institutions, including their priorities, can be derived from the textbooks that will be displayed. Furthermore, the time spectrum will be defined with the older elements occupying the left side of the picture and the more recent things to the right; therefore, the "Tac school" will be displayed on the left with Air University on the right. However, the placement of the World War II events under both of the schools will represent two things--linkage and time. In the 1930's the Air Corps Tactical School developed the doctrine and strategies used by our Army Air Force in World War II. Later, Air University evolved from the doctrinal thinking of ACTS and the air combat experiences of the war. This relationship will be expressed with a smooth transition of the elements of all three sub-areas to and from each other. Another transition that may not be recognized initially will be the change from a green undertone in the paint to a bluish one which occurs slightly into the Air University scenes. This symbolically defines the point when the United States Air Force received its independence from the United States Army. Consequently, all these devices will aid in expressing a more total

interpretation of this biographical account, and yet, one does not have to read massive amounts of historical literature to grasp the pure essence of it.

Without the extensive research, however, the substance of this painting would not truly represent the proper balances and linkages. These are necessary to understand the factors that resulted in the laying of the cornerstones on which the foundation of Air University rests today.

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**VPPENDIX** 

Air University as it has evolved over the past 40 Command and Staff College course officer Maj. Larry Kangas as a part of his class project. The years is the theme for this painting done by Air

Center by B. Gen. Frank E. Willis, commandant painting was presented to Col. Constantine A. Pappas director of the Air Force Wargaming of ACSC, in ceremonies held Monday. The

anniversary will be displayed at the Wargaming Center since it is the newest addition to the Air University complex. Project Warrior illustration honoring AUs 40th

**VPPENDIX** 

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